Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Rostad, Clarence S Revocable Trust, c/o Dan Rostad, Trustee, 432 Old Boulder Rd., Big Timber, MT 59011

2. Type of action: Application to Change an Existing Irrigation Water Right 43BJ 30133671

3. Water source name: Boulder River

4. Location affected by project: Sections 1, 2, and 3, T1S, R14E, Sweet Grass County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to change the place of use and point of diversion on two water rights. Applicant proposes to change from flood irrigation to center pivot irrigation on 191.56 AC within the historically irrigated footprint and add 66.76 AC of new center pivot irrigation. The Applicant proposes to retire 85.12 AC of historical flood irrigation and keep 39.32 AC of flood irrigation. The Applicant proposes to add the points of diversion for the Clause-Weaver and Lamp-Nelson ditch to both water rights and divert up to 8.00 CFS from either ditch head gate. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Fish, Wildlife and Parks
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation
Montana Natural Heritage Program
Montana Sage Grouse Habitat Conservation Program
United States Natural Resource Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **–** The Boulder River is classified by the Montana Department of Fish, Wildlife and Parks as chronically dewatered in the five miles upstream from the mouth at Big Timber. The points of diversion and place of use for this change application are not within the reach classified as dewatered. The change will reduce the flow rate of water diverted from the Boulder River and possibly benefit the downstream reach.

Determination: Possible positive impact

Water quality **–** The Boulder River is classified as impaired by the Montana Department of Environmental Quality on the basis of not fully supporting aquatic life due to channel impacts from agriculture. Drinking water uses and primary contact recreation are fully supported. The overall water classification is B-1. The change from flood irrigation to center pivot irrigation has the potential to increase water quality due to higher efficiency and lower return flows that could carry fertilizer or other contaminants.

Determination: Possible positive impact

Groundwater **–** The only potential impact to groundwater is a reduction in return flow from the change in irrigation method. Because there are two major ditches/canals that may intercept return flow before it reaches the river, there is little possibility of substantial reduction to quantity of water returning to the Boulder River. No potential changes to groundwater quality or quantity are recognized.

Determination: No significant impact

DIVERSION WORKS – The project does not propose any changes to the diversion works from the Boulder River or the conveyance methodology. No changes to existing infrastructure are proposed and no possible impacts recognized.

Determination: No impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **–** According to the Montana Natural Heritage Program, there are nine animal species of concern in the project area and no plant species of concern. The animal species of concern are the Little Brown Myotis, Grizzly Bear, Golden Eagle, Great Blue Heron, Greater Sage Grouse, Bobolink, Peregrine Falcon, Greater Short-horned Lizard and Trout. Change from flood irrigation to sprinkler irrigation on historically irrigated agricultural land has little potential to adversely affect habitat for the listed species. No land use changes are proposed, and no construction activities contemplated. A letter from Carolyn Sime, Montana Sage Grouse Habitat Conservation Program Manager, to Daniel Rostad, Applicant, dated October 25, 2019, indicates that the project activities are consistent with the Montana Sage Grouse Habitat Conservation Strategy.

Determination: No significant impact

Wetlands **–** There are no wetlands in the project area and none are proposed.

Determination: No impact

Ponds – There are no ponds in the project area and none are proposed.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – The primary soils in the project area are loams and clay loams including Wayden-Caster-Cabba Complex and Linwell clay loam. These soils are well-drained and generally non-saline. Although slopes in the area are up to 15%, high efficiency sprinkler irrigation will decrease soil instability.

Determination: No significant impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – The existing vegetation is agriculture and the proposed use is agricultural. No change to land use is proposed and no construction is anticipated. It will be the responsibility of the land owner to prevent the establishment or spread of noxious weeds.

Determination: No significant impact

AIR QUALITY – The change from flood irrigation to center pivot sprinkler irrigation has no potential to impact air quality.

Determination: No impact

HISTORICAL AND ARCHEOLOGICAL SITES – The project is not located on State or Federal land.

Determination: Not applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No other impacts on environmental resources of land, water and energy are recognized.

Determination: No impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – There are no known local environmental plans or goals.

Determination: No impact

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – The project area is not located near recreational or wilderness areas and there is no access through the project area.

Determination: No impact

HUMAN HEALTH - The change from flood irrigation to center pivot sprinkler irrigation has no potential to impact human health.

Determination: No impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No impact

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? No significant impact

(*b) Local and state tax base and tax revenues?* No significant impact

(c) Existing land uses? No significant impact

(*d) Quantity and distribution of employment?* No significant impact

(e) Distribution and density of population and housing? No significant impact

(f) Demands for government services? No significant impact

(g) Industrial and commercial activity? No significant impact

(h) Utilities? No significant impact

(i) Transportation? No significant impact

(j) Safety? No significant impact

(k) Other appropriate social and economic circumstances? No significant impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts from the proposed project are recognized.

Cumulative Impacts: No cumulative impacts from the proposed project are recognized.

3. *Describe any mitigation/stipulation measures:* None

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The only reasonable alternative to the proposed action is a no-action alternative. The no-action alternative does not prevent any significant environmental impacts and prevents the land owner from increasing agricultural efficiency and production.

PART III. Conclusion

1. Preferred Alternative: Issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

2 Comments and Responses: None

3. ***Finding:***
*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: An environmental assessment is the appropriate level of analysis for this proposed action because there were no significant negative impacts recognized and some potentially positive impacts.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison
Title: Regional Manager
Date: 10/21/2019